SECTION C

This document covers the assembly of the arctic supplement for use by the Department of Defense as a component of operational rations.

C-1 ITEM DESCRIPTION

ACR-A-001A, ARCTIC SUPPLEMENT ASSEMBLY REQUIREMENTS

The Arctic Supplement is used to augment the Unitized Group Ration (UGR). The Arctic Supplement contains styrofoam clamshell trays and hot cups with lids, and provides additional snacks and hot beverages.

Assembly of the Arctic Supplement consists of three shipping containers (half tier per module); six shipping containers fit on one tier of a standard 40 by 48 pallet. There are four tiers per pallet. Within the shipping containers are cans, bottles, boxes and bags of food items, disposable meal trays, dining packets, and paper cups.

C-2 ASSEMBLY REQUIREMENTS

A. Components.

(1) $\underline{\text{Module components}}$. The components required for module assembly shall be as specified in table I.

TABLE I. Module components

TABLE 1. Module Components				
Component		Reference		
Candy		_		
Peanut bar	Type IX	A-A-20177A		
Chocolate disks, pan coated	Type VI, flavor 1	A-A-20177A		
Snack items				
Fruit bars		A-A-20212		
Toaster pastry	Type 1, Flavor 3	A-A-20211		
Nut raisin mix		PCR-N-002		
Soup				
Soup mix, dehydrated, chicken noodle		ADCoP		
Beverages				
Apple cider, instant, individual servings - 40	ADCoP			
Cocoa beverage powder - 50 1 oz. packets/box		ADCoP		
Coffee, instant - 16/bag		ADCOP		
Coffee, roasted, ground, drip or universal grind - 13 oz. can		ADCoP		
Other food items	7 7 000427			
Cream substitute, dry, nondairy - 16 packets/b	A-A-20043A			
Diamaahlaa				
<u>Disposables</u>	1 /	ADCoP		
Bag, plastic, general purpose (4 banded) - 1 each 1/				
Cup, disposable lid (50/bag), disposable styrofoam cup (18/bag) A-A-2577				
Type I, Style A, Class 3 Tray, clamshell, styrofoam, 3-Compartment 2/ NSN 7350-01-080-				
Tray, clamshell, styrofoam, 3-Compartment $\underline{2}$ / NSN 7350-				

 $[\]underline{1}/$ Bags dimensions shall be approximately 33 inches in width by 40 inches in depth with a nominal thickness of 0.002 (\pm 0.00025 inch). The bags shall be clear in color.

2/ Size 9 1/8" x 9" x 3 1/4"

(2) Module contents. The module contents shall be as specified in table II.

TABLE II. Module contents

Component	Issue per 50 Individuals
Snacks: Fruit bar Chocolate disks, pan coated Peanut bar Toaster pastry Nut raisin mix	25 PG 25 PG 1 BX, 36/bx 25 PG 50 PG
<pre>Drinks: Cocoa beverage powder Coffee, ground Coffee, instant Creamer Apple cider, instant Soup mix, commercial, dehydrated, chicken w/noodle</pre>	1 BX, 50/bx 1 pound CN 1 BG, 16/bg 1 BG, 16/bg 1 BX, 40/bx 2 BX, (approx 50 servings)
<u>Disposables:</u> Plastic bags Plastic lids Styrofoam cups Styrofoam clamshell trays	1 PG, (4 banded) 2 BG, 50/bg 6 BG, 18/bg 50

SECTION D

D-1 PACKAGING

A. <u>Shipping container loading sequence</u>. Each component listed in table II shall be loaded into a sized shipping container in the order indicated in table III. Abbreviations used are as follows:

CN=can BT=bottle BG=bag PO=pouch CO=container PG=package BX=box

TABLE III. Loading sequence

ARCTIC SUPPLEMENT				
1a	2a	3a		
35 PO Snack mix	50 Styrofoam trays 4 BG Styrofoam cups	25 PO Toaster pastry 25 PO Snack mix		
1b	NO PARTITIAN IN BOX 2	3b		
1 BX Dehydrated soup 2 BG Cup lids 1 BG Dairy creamers 1 BX Apple cider 1 PG Plastic trash bags 25 PG Chocolate disks 1 BG Coffee 1 CN Coffee		2 BG Styrofoam cups 1 BX Cocoa beverage 1 BX Peanut bars 25 PO Fruit bars		

C. $\underline{\text{Unit packaging}}$. Components shall be packaged in accordance with applicable documents as referenced in table I.

D. Intermediate packaging.

- (1) <u>Packets</u>. Packets of cream substitute shall be packaged in intermediate bags in accordance with applicable documents or as referenced in table I.
- (2) <u>Styrofoam meal trays, and paper cups</u>. Fifty styrofoam meal trays shall be packaged in quantities of 25 each. Styrofoam cups shall be packaged in quantities of 18 each.

D-2 LABELING

A. Shipping containers. Shipping containers used for the Arctic Supplement shall be marked in accordance with DPSC Form 3556, Marking Instructions for Shipping Cases, Sacks, and Palletized/Containerized Loads of Perishable and Semiperishable Subsistence, and as specified in the contract. The color of the labels for the Arctic Supplement shall conform to 25440 or 25488 of FED-STD 595, Colors Used in Government Procurement. The height of characters on labels shall be 3/8 inch (\pm 1/8 inch). Labels shall be permanently affixed with water-resistant label adhesive.

D-3 PACKING

A. Packing.

- (1) Arctic Supplement. Each complete Arctic Supplement shall be assembled into three shipping containers using the suggested loading sequence specified in table III. However, because of the variety of packaging available from different manufacturers of the same product, it may be necessary to move a product from one compartment to another in boxes 1 and 3, where space is more available. Each shipping container shall conform to style RSC, grade V3C of ASTM D 5118, except box 2, which shall conform to style RSC-L. The inside dimensions of the shipping container shall be 23 ¾ inches in length, 13 3/16 inches in width, and 8 3/4 inches in depth. Boxes 1 and 3 shall be fitted with two V3C partitions in accordance with figure 1 and 3. Kraft paper dunnage (untreated) shall be used to fill voids and immobilize components. Each container shall be sealed (including the bottom) including the bottom) in accordance with B or C of ASTM D 1974. If the shipping container is assembled by stitching, a paperboard pad shall be used on the bottom of the box.
- (2) <u>Partitions</u>. Each shipping container shall be fitted with two partitions fabricated from the same fiberboard as the box. The center panel of each partition shall meet at the center of the box to divide the box into two equal compartments (cell "A" and "B"). The end panels of the partitions shall butt together at each end of the box (see figure 1). The partitions shall be full depth partitions and fabricated according to figure 3.

D-4 UNITIZATION

A. <u>Unit loads</u>. Unit loads shall be as specified in DSCP Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items.

D-5 MARKING

- A. <u>Module marking</u>. The three boxes comprising one module shall be positioned on the pallet side by side and marked in sequence so that the module can be identified as one unit (two, three box module units to a tier). Using either labels or stencils on the top panel, with characters at least 2 inches high, the boxes shall be identified as "BOX 1", "BOX 2", and "BOX 3". The characters shall be oriented so as to be readable when facing the marked end panel.
- B. <u>Unit loads</u>. Unit loads shall be marked as specified in DPSC Form 3556. Marking shall be in a permanent contrasting color using the largest characters possible.

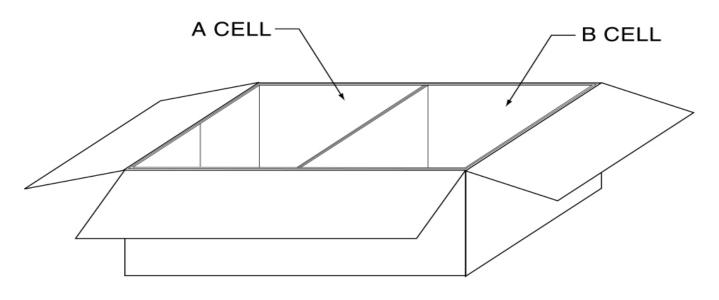


FIGURE 1
SHIPPING CONTAINER WITH PARTITIONS

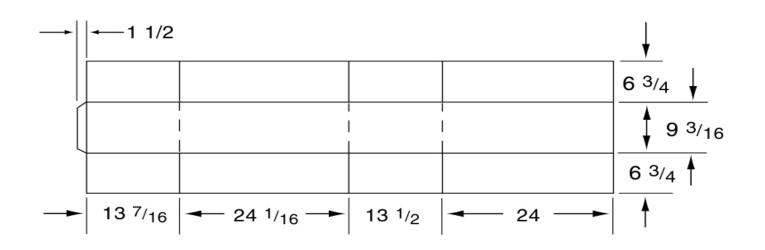


FIGURE 2

STYLE RSC FIBERBOARD (SIZE: 23 ³/₄ x 13 ³/₁₆ x 8 ³/₄ I.D.)

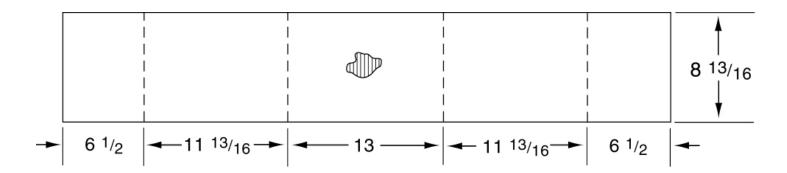


FIGURE 3

SHIPPING CONTAINER PARTITIONS (2 REQUIRED)

SECTION E INSPECTION AND ACCEPTANCE

The following quality assurance criteria, utilizing ANSI/ASQC Z1.4-1993, Sampling Procedures and Tables for Inspection by Attributes, are required. When required, the manufacturer shall provide the certificate(s) of conformance to the appropriate inspection activity. Certificate(s) of conformance not provided shall be cause for rejection of the lot.

A. Definitions.

- (1) <u>Critical defect</u>. A critical defect is a defect that judgment and experience indicate would result in hazardous or unsafe conditions for individuals using, maintaining, or depending on the item; or a defect that judgment and experience indicate is likely to prevent the performance of the major end item, i.e., the consumption of the ration.
- (2) $\underline{\text{Major defect}}$. A major defect is a defect, other than critical, that is likely to result in failure, or to reduce materially the usability of the unit of product for its intended purpose.
- (3) <u>Minor defect</u>. A minor defect is a defect that is not likely to reduce materially the usability of the unit of product for its intended purpose, or is a departure from established standards having little bearing on the effective use or operation of the unit.

B. Packaging examination.

(1) <u>Arctic Supplement - assembled module</u>. The assembled Arctic Supplement module shall be examined for the defects specified in table IV. The lot size shall be expressed in assembled modules (3 shipping containers per module). The sample unit shall be one fully assembled module. The inspection level shall be S-2 and the AQL, expressed in terms of defects per hundred units shall be 2.5 for major defects and 4.0 for minor defects. Five completely assembled modules (consisting of 3 shipping containers per module) shall be randomly selected from the lot and examined for critical defects. The finding of a critical defect shall be cause for rejection of the lot.

TABLE IV. Arctic Supplement defects

Category			Defect
<u>Critical</u> 1	<u>Major</u>	Minor	Any canned food component leaking or damaged so as to expose contents.
	101		Bottled components that are leaking.
	102		Boxed products damaged or leaking.
	103		Pouched products damaged or leaking.
	104		Presence of rodent or insect infestation.
	105		Shipping container not as specified.
	106		Markings, labels, not as specified.
	107		Shipping container not closed as specified.
	108		Component item missing.
		201	More than 5% of the quantity of any disposable is crushed or damaged so as to be unusable.
		202	Dunnage or box partitions not as specified.
		203	Intermediate bag has tear or open at seam.

(2) <u>Unit load examination</u>. The unit loads shall be examined for the defects listed in DSCP Form 3507, Loads, Unit: Preparation of Semiperishable Subsistence Items. The lot size shall be expressed in units of unit loads. The sample unit shall be one unit load. The inspection level shall be S-4 and the AQL expressed in terms of defects per hundred units, shall be 4.0. Any nonconformance shall be classified as a major defect and shall be cause for rejection of the lot.

SECTION J REFERENCE DOCUMENTS

DSCP FORMS

DPSC FORM 3556 Marking Instructions for Shipping Cases, Sacks and Palletized/Containerized Loads of Perishable and Semiperishable Subsistence

DSCP FORM 3507 Loads, Unit: Preparation of Semiperishable Subsistence Items

FEDERAL STANDARD

FED-STD-595 - Colors Used in Government Procurement

NON-GOVERNMENTAL STANDARDS

AMERICAN SOCIETY FOR QUALITY CONTROL (ASQC)

ANSI/ASQCZ1.4-1993 - Sampling Procedures and Tables for Inspection by Attributes

AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM)

D 1974 - Standard Practice for Methods of Closing, Sealing, and Reinforcing Fiberboard Shipping Containers

D 5118 - Standard Practice for Fabrication of Fiberboard Shipping Boxes